/401 cont./

178 occupation may be. Imported products appear only at breakfast: *262 bread, sweetened condensed milk, lumps of sugar. The other [264 two meals are still always composed of four products, rice, [439 millet, fish, and meat, which may be combined in different ways, and a fifth that is always present, oil. The single element of diversity comes from the more or less great variety and the more or less great quantity of vegetables and manioc that are incorporated into the traditional dishes, and, of course, the skillful proportion of condiments of all sorts.

*511 With a few exceptions (1), the study of the expenses of *262 [177

1. The more important exceptions are Nos. 39 and 43. These two units of consumption have entirely adopted European food habits, and are otherwise not comparable with the others. This is why we neglect them a little on this point.

our families for food is very nearly limited, aside from bread, milk, and sugar, to a description of the variations ascertained in the consumption of these few essential products.

One can state that in general all of our families consume rice by liking and millet by necessity. Rice is the food of choice, millet entering in only when the financial situation of the family demands it, or in order all the same to provide a little variety.

● 243 Rice is 30 to 35% more expensive than millet. It is culti- 311 vated on a small scale in a few wet zones in the countryside [435 around Thiès, whereas millet grows nearly everywhere. The * [511 truly productive rice zones closest to Thiès are the Casamance to the south and the lower course of the Senegal to the north. On the east it appears only with the upper course of this river and in the region /402/ drained by the Niger and its tributaries, *262 in Guinea, and in the Sudan. In reality, it is an imported 177 product. The traditional diet of this region was primarily based on millet.

/402 cont./

262* kilograms, respectively.

511* The number of consumers, in conjunction with the lowness of the incomes, seems to be determinant here. It always is in the category of the high incomes: No. 37, excess of millet 25%, unit of consumption 24; No. 41, excess of millet 50%, unit of consumption 14. /403/ /Table IV appears here./ /404/ Table V appears here./ /405/ And for a stronger reason in the case of families 20, 22, 23, 24, 25, and 27, composed respectively of 10, 12, 18, 21, and 15 persons, the incomes of which are still very average.

There is another obvious reason for this greater consumption of millet: it is the case of the cultivators, who, producing millet, consume it almost entirely. Nos. 6, 12, 14, 20, 23, [243] and 32 consume millet that they have cultivated themselves; all are not cultivators, but own a few fields in the vicinity of Thiès. Cultivator No. 10, whom we mentioned above, preferred to sell his millet immediately after the harvest.

As for the harvest of No. 24, it is not sufficient to feed 21 persons; it is sometimes necessary to buy a few kilograms to supplement it.

262* 511* These few statements prove what we said above: it is in large part by necessity that the Thiès people eat millet instead of rice. If they do not do it, it will almost always be to the detriment of balancing their budget. Consuming two times less rice as against two times more millet, families 2 and 4 save sums equivalent to 4.5 % and 4.1% of their incomes.

The portion of the income devoted to the purchase of rice is by far, on the whole, the greatest for the small incomes. For incomes lower than 10,000 francs, it is exceeded in three cases by the portion for meat (1) (in six cases for the incomes

1. In two cases by that for bread.

higher than 15,000 francs).

The quantities consumed, however, are low, even very low. A man of family 6 consumes 14.6 kilograms of rice and 11.6

[Text continues on p.28]

5: Crowder J-5 (1955-1961) 1962
MS37 Senegal MS37

progress. This he then transmits to the village, and in Casamance *animation* has worked to the extent of building a thirty-five kilometre road which cut the journey between two important villages by nearly fifty kilometres. In the Vallée du Fleuve, people who never grew rice before have now quadrupled their incomes by producing rice under a rural animation scheme.

All this President Dia hopes will raise the standard of living of each man by 3.5 per cent each year, doubling it by the fourth four year plan in 1975.

The plan is an ambitious one, an attempt to create a new Senegal synthesising the best of Africa and Europe. If it works, and the political future of both Senghor and Dia may well depend on this, then Senegal may become a pilot nation for Africa both economically and culturally. Senegal will then be in a sense a justification for the French assimilation policy, for although it failed in its attempts to assimilate the Senegalese both culturally and politically it has left profound marks on Senegalese society. And even if the experience of assimilation in Senegal has demonstrated the immense difficulties not only of one group trying to assimilate the other to its own standards, but of even getting the assimilating group to accept the other group as political and cultural equals, the end result may be the production of an African society which, whilst maintaining its own national identity, may prove a bridge between Africa and Europe and their two cultures.

/37/

During the dry season the ground appears bare, but with the first rains it is covered with a lusty vegetation, and it is principally the Gramineae that thus again adorns with verdure this land previously so desolate. S 137

I. -- Gramineae: Food Crops

The petit mil /small millet/, mil chandelle or penicillaire /candle or penicillate millet/ (Pennisetum), is native to Africa. It is also cultivated in India; undoubtedly it was at the time of the slave trade that it was introduced into America. This is the early small millet, or souna of the Wolof. The souna must be sown at the time of the first rains. It shoots up promptly; it grows well in the light, sandy soils (groundnut soils). After the 15th of August it begins to ripen, and one can already eat the unripe ears roasted. When it begins to push out of the ground, the Senegalese, and especially the Sérère /Serer/, sow beans between the rows; this is the volet (Phaseolus vulgaris), which will be eaten as green beans from the 15th of August on. The souna root is regarded by the Africans as a poison and, according to them, might be one of the causes of sleeping sickness. S 243 W [243] S [252] S [244] S [753]

Another variety of small millet is the sanio of the Wolof, late millet or bearded millet (Penicillaria spicata). This is a late variety of small millet with the ears covered with very strong beards, which, entering the eyes of birds, prevents them from eating it. It is said that it gives sottiete (eye ailments). The sanio grows in heavy soils. It is sown during the rainy season and harvested at the end of it, at the same time as groundnuts. W [243] S [753]

The gros mil /great millet/, or basi of the Wolof, requires a heavy and clayey soil. It ripens much later than the souna and can be cultivated in the middle of the rainy season. Sometimes it can even be planted again toward the end of the winter season when one sees that the first sowings have failed. The great millet, or basi, is sorghum (Sorghum sudanense). W [243]

Millet reduced to flour and granulated is called "couscous." S 262

/37 cont./

This is the most common preparation, but the native cuisine is acquainted with a host of others. The couscous is light, refreshing, and very nourishing. S 262

Millet is also given to horses. Basi is used the most in this practice, but souna gives them more vigor, although heating them up more. S 231

The Africans, by making millet germinate and putting it in water to boil for several days, obtain a kind of invigorating beer (pouh in Wolof), but one which, if taken in great quantities, produces a very heavy drunkenness. Millet, just like maize, fattens animals quickly, especially poultry. S W 273 S 231

Sorghum is a plant widely cultivated in Senegal. It is necessary to accustom the Senegalese farmer as rapidly as possible to replacing the ordinary variety by that of the sweet sorghum, that is, the saccharatum variety, which would have the advantage of giving sugar and grain. This saccharatum variety is utilized a great deal in the United States for the production of sugar. Then a sugar refinery would be created, which would be one more source of wealth for this country, wealth all the more appreciable because the African is fond of delicacies and a great consumer of sugar (mint tea, Moorish coffee, and infusions). S 243 S [493] [263] [272]

Rice. It is cultivated in Senegal in damp places, on the edges of marigots /watercourses/, in Sine, in Casamance, and at the mouth of the river (Richard-Toll, etc.). A large number of varieties is known, some of which grow in relatively dry and high places; black rice is one of them.

The African rice is Oryza glaberrima, but wild rice grows by itself; this is Oryza latifolia (punctata and sylvestris). The native rice is much more in demand by the Africans and often even by the Europeans than foreign rice. African cooks excel in preparing rice in all kinds of ways. S [137] S 262

Rice is emollient, soothing, very nourishing, and not at all binding or constipating as is sometimes thought. It also gives a beer by fermentation. Rice water renders great service in dysentery, as a beverage, and for bathing. Rice water is also a cooling drink for feverish and inflammatory ailments. Finally, rice powder is useful as an absorbent for skin diseases. S 273 757 [272] [515]

/38/

Maize (Zea mays L.): Succeeds well when sown at the beginning of the winter season. The native species sown under these conditions is very beautiful and gives large yellow ears, very well filled out. The Africans eat fresh roasted corn, and, when it is hard, they make couscous of it. The infusion prepared with the fruit is emollient and diuretic. The styles or stigmas of maize are famous as diuretics and cure several ailments of the urinary tract (cystitis, gravel, dysuria, etc.); the young kernels, when cooked, constitute an excellent vegetable and replace peas; the flour gives a beer and an alcoholic extract. The husks of the ears serve to make quite springy mattresses.

II. -- Useful Gramineae

(not being subject to any cultivation)

Bamboo. -- Grows in the wild state in the Ravin des Voleurs /Ravine of Thieves/ near Thiès. The native species is rather small. Stakes, frames, masts of dugouts, huts, and fences, but especially clinting (constructions of bamboo filled in with lime) are made of it. The young shoots are said to be edible, and the sweet sap is supposed to be an agreeable drink. In Casamance a small species of bamboo grows in shady places; pipestems are made of it.

Begnefala (Andropogon shirensis). -- A tall gramineous plant with a penetrating aromatic odor. It is used in African medicine and the old colonials used it with success at the time of the great epidemic of yellow fever at Dakar in 1927. For fevers, one pounds the floral heads mixed with lemon or vinegar and energetically rubs the body with this mixture.

Hada (Imperata cylindrica). -- A gramineous plant with a very hard leaf and whitish ear, which is used for covering the roofs of huts.

Hat (Andropogon gayanus). -- Tall grass whose stem is used in making fences around huts.

Haham or cram-cram (Cenchrus biflorus). -- Its seeds fasten themselves to clothing and are very disagreeable. Is gathered and

/7/

S 244 generally at the end of October or the beginning of November. Harvesting is done by cutting the stalks with the hilaire four or five centimeters under the ground. They are collected into little piles, sometimes protected by a shelter of plant material for drying, and then heaped into stacks to await the detachment S [462] of the shells several weeks later by threshing or by hand. This last operation is entrusted to the women and children. All of these tasks require great effort, and the more so since during the S [243] same brief period one must busy himself with the food crops, millet, niébés /Vigna/, etc.

S 241 244 W 244 The ways in which the groundnut is associated with the food crops are quite variable and put their mark on the agrarian landscape.

1) The lougan of the Ouoloff peasant. The Ouoloff peasant of Cayor or of Siné-Saloum represents the most traditional type of cultivator of groundnuts. He still practices shifting cultivation on his lougan /cultivated field/ cleared by fire in the open bush. Although he does practice a millet-groundnut rotation, often with very little strictness, he does not know the virtues of fertilization. He cultivates the soil until it is exhausted and then abandons it for 15 or 20 years, which allows it to go back to bush. Today, however, demographic pressure does not always permit him to dispose of the vast areas of land required for this long rest. S W [433] The soil is rapidly being exhausted; the yields are diminishing. In Cayor the latter have fallen off at least 700 kilograms per hectare. The cultivation of the groundnut is very obviously regressing.

S SR 241 2) The organized ground of the Sérère /Serer/ peasantry (2). The Sérère are a group of Sudanese origin, driven back

S [113]

2. Pelissier, P. "Les paysans sérère, essai sur la formation d'un terroir au Sénégal /The Serer peasants, an essay on the formation of a ground in Senegal/." Les Cahiers d'Outre-Mer, Vol. VI, 1953, No. 22, pp. 105-127.

22:Winterbotham et al. K-4 (no date) 1944 M837 Senegal MS37

Sedhiou (12° 42′; 15° 31′ W.). Population, 1,653. Provincial headquarters. Medical post. Emergency landing-ground. Regional School.

Sedhiou is on the right bank of the Casamance, 68 miles above Ziguinchor and 110 miles from the sea, and it is only usable by vessels drawing up to 5 feet. Formerly more prosperous than it is to-day, it has some brick buildings and shops. Many of the traders are Syrians, and there is a modest export of ground-nuts, hides, rice, and wax.

By colonial road Sedhiou is 58 miles from Bignona, 74 miles from Ziguinchor, and 62 miles from Kolda.

11. MINERALS

The principal mineral exported from the colony is ilmenite, which is washed from beach sands between Rufisque and Cape Rouge, between Joal and Diakhanor, and at the mouth of the Casamance. Zircon (Vol. I, pp. 295–6) is obtained from the same sands, the ilmenite:zircon ratio being about 3:1. Other minerals of potential value are phosphates and limestone, both of which occur in Lower Eocene strata. Lenticular beds of phosphate, ranging from 30 to 65 per cent. bone phosphate of lime, are found near Matam and near Thiès. Limestones and marls are more widespread than in any other colony, and at Rufisque they have been worked experimentally for the commercial production of cement. Bitumen has been encountered at Dakar in borings for water, but investigations have shown that the geological structure is unsuited to the accumulation of petroleum.

12. AGRICULTURE

The Gambia divides the millet from the manioc zone, but ground-nuts are the chief crop of both. Sisal-growing is an important, though more recent, industry. South of the Gambia the Casamance Territory provides a rich area for fruit and subsistence crops as well as for ground-nuts.

There is far more production for export than in any other colony.

Food Crops

Millets. Millets form the staple diet of the majority of the native population and are grown all over that part of the colony north of the

22:Winterbotham et al. K-4 (no date) 1944 MS37 Senegal MS 37

Gambia, often in rotation with ground-nuts. Of the quick-maturing varieties *souna* and *sanio* are the most popular, the former thriving in sandy soil, the latter in heavier ground. Several kinds of sorghum are also cultivated. In the river area millet is sown where the floods have subsided and is harvested in April. In other parts it is planted immediately before the rainy season. Production probably averages about 300,000 tons annually. The export of millet from one province to another is controlled according to local needs.

Rice. The area flooded by the Casamance is naturally suited for rice cultivation. The rice-fields are handed down from father to son, each family growing sufficient for its own consumption and to pay its taxes. A store of rice is always kept to guard against a lean year or to be exchanged for some other commodity required.

Sugar-cane. This is grown near every village where there is enough water. No attempt has been made to commercialize the crop, and the West African varieties are more woody and contain less juice than those grown elsewhere for export. Sugar-cane (*Saccharum officinarum*) is a perennial plant of the grass family. It is easy to grow, even near the sea, but takes at least a year to mature. When grown for local use, as it is here, sugar is not extracted, but the red or white stems are chewed.

The Baobab. The baobab (*Adansonia digitata*) is found generally in the thornland (Plate III), and is, therefore, much in evidence in Senegal. It is remarkable for the large girth of its trunk in comparison to its branches and leaves. The long green fruit, known as monkey-bread, is used as a food or as a seasoner. Boiled with water and then cooled, it also makes a refreshing drink, while the leaves and the young shoots are also good to eat. The inner bark yields a tough fibre, which can be twisted into rope or woven into a waterproof cloth. About 30 years ago a factory was opened at Dakar to prepare the fibre for export to rope- and paper-making firms in France. The bark and fibre can be stripped off without causing the death of the tree.

Manioc, beans, and maize are grown generally in the vicinity of villages. In the Cape Verde peninsula these, as well as yams, sweet potatoes, and melons, are grown for the Dakar markets.

Economic Crops

Ground-nuts. Ground-nuts (*Arachis hypogaea*) require a tropical climate and an annual rainfall of from 14 to 60 inches. They are the

/118 cont./

244 433 242 There is no doubt, however, that the yield per hectare is diminishing and that on much of the land today it is no more than 500-600 kilograms per hectare, instead of the 700-800 kilograms, and even 900, as has been seen sometimes in Sine. The land is becoming exhausted as a result of the lack of fertilizer and the absence of crop rotation. Two other factors likewise come into play: the too primitive native methods of cultivation and the inadequate selection of seeds. The native cultivator continues to work his land with the [412] hilaire, a kind /Pl. II appears here/ /119/ of spade with which he contents himself with scratching the soil. He thus reduces his work too much; he does his dressings badly or inadequately.

It has been demonstrated by the experiments made by the Compagnie française de l'Afrique Occidentale at Latmingué that with mechanical farm implements one could easily double the yield per hectare. On newly cleared land and with these methods, the yield has never been less than 1,000 kilograms and at times has reached 1,500 kilograms per hectare. It is necessary to persuade the native that he will profit by working the land with a little better equipment. The agricultural [654] services are working at this, and it is to be hoped that the more modern cultivation methods will double the yield. This is a critical problem.

● 243 433 Millet. Millet is likewise a crop on the road to progress. The types cultivated are: small and great millet, or, according to their native names, souna, sanio, bassi, fehla.

In 1927, the cultivated area was 240,000 hectares, with a total production of 119,000 tons, a little more than the needs of the population. In 1925, for a production of 80,000 tons, the population had sowed 210,000 hectares. The surplus production is consumed in the regions bordering Sine-Saloum.

Rice. Different varieties of rice are cultivated, especially in Sine and Bas-Saloum, where the annual rainfall is greater and where the soil is suitable for this crop. One can estimate that 15,000 hectares are planted to rice with a total

/119 cont./
433 production of about 14,000 tons, which are entirely con-
[243] sumed on the spot.

[244] Manioc. Manioc is the crop grown in some plantings
[474] around the villages. The native Société de Prevoyance distributed many cuttings in most of the cantons in 1925.

About 5,000 hectares are planted to manioc, with a production of 25,000 tons of fresh manioc.

[243] /120/ Maize. Maize is not planted everywhere. It is cultivated in Bas-Saloum and in Sine, a little in Saloum. There are 2,000 hectares of maize and 2,000 tons of production.

[244] Beans (niébés). The bean called "niébé" is planted on about 15,000 hectares, yielding a harvest of 7,000 tons.

Production, however, remains stationary, because the plant is attacked by various insects (weevils).

[245] Bananas. Two banana plantations, established by the
[654] administration, exist at Sangako and Bani in Bas-Saloum. They could be multiplied in this region.

[249] Sugar cane. This product is not cultivated very much -- the soil is not suitable -- with rare exceptions.

[248] Cotton. Native cotton is cultivated only in small stretches. This crop takes up 700 hectares of land.

[249] Indigo. The region that is the principal producer of indigo is Bas-Saloum. This crop has tended to increase for the past several years.

[314] Kapok. The kapok tree lives in the wild state. There are some in the cantons along the railroad (N'Gahaye-Gossas), but especially to the south, starting at Kaffrine and above all in Koungheul. The native does not harvest it or harvests it poorly. The circle could yield 100 tons of kapok, but it provides only 20 tons at the most, used locally or sold abroad.

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